

United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING D	ATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/656,366	09/08/2003		Kuo-Ping Yang	YANG3149/EM 8244		
23364	7590 10/20/2006		EXAMINER			
BACON &	THOMAS, PL	LLC	VUU, HENRY			
625 SLATE: FOURTH F			ART UNIT	PAPER NUMBER		
ALEXANDRIA, VA 22314				2179	·-	
				DATE MAILED: 10/20/2000	DATE MAILED: 10/20/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)					
	10/656,366	YANG ET AL.					
Office Action Summary	Examiner	Art Unit					
	Henry Vuu	2179					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DATE - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period was really received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be timular apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE!	I. lety filed the mailing date of this communication. C (35 U.S.C. § 133).					
Status							
2a) ☐ This action is FINAL . 2b) ☑ This 3) ☐ Since this application is in condition for allowar	Responsive to communication(s) filed on <u>08 September 2003</u> . This action is FINAL . 2b)⊠ This action is non-final. Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims							
4) Claim(s) 1-10 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) 1-10 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement.							
Application Papers							
9) ☐ The specification is objected to by the Examine 10) ☑ The drawing(s) filed on <u>08 September 2006</u> is/a Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) ☐ The oath or declaration is objected to by the Ex	are: a)⊠ accepted or b)⊡ objec drawing(s) be held in abeyance. See ion is required if the drawing(s) is obj	e 37 CFR 1.85(a). lected to. See 37 CFR 1.121(d).					
Priority under 35 U.S.C. § 119							
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 							
Attachment(s) 1) X Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	nte					

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3, 7 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Lemelson et al. (Patent No. 5,823,788).

As to independent claim 1, Lemelson et al teaches:

A system for enabling a plurality of people (students – see e.g., col. 2, line 59) to utilize an interactive program (program – see e.g., col. 6, line 59; i.e., the instructor uses the program stored in memory 31 to interact with students), the system (interactive educational system 10 – see e.g., col. 2, lines 47 – 48; i.e., interactive educational system 10 as a whole corresponds to the instructors base station 11 and student stations 12(1) through 12(S)) comprising: a host computer (instructor base station 11 – see e.g., col. 2, line 50; i.e., the host computer corresponds to the instructors base station, which can be used by a human instructor or a teaching computer) comprising a processor (microprocessor 40 – see e.g., col. 6, line 21; i.e., the microprocessor executes the program and data stored in RAM 41 or ROM 42) and a memory (Random-Access Memory (RAM) 41 – see e.g., col. 6, line 23; i.e., the memory corresponds to the Random Access Memory (RAM) 41 or Read-Only Memory (ROM)

Page 3

42), wherein the memory stores an interactive program (program instructions – see e.g., col. 6. line 22; i.e., RAM 41 and ROM 42 store program instructions and data) executable by the processor (see e.g., col. 6, lines 21 – 24; i.e., executing corresponds to processing operations performed by the microprocessor 40 within instructor base system 11), the interactive program accepting (see e.g., col. 6, lines 26 - 27; i.e., the program utilizes a handheld input/output device 43 to accept operational instructions) a plurality of different operational instructions (see e.g., col. 6, lines 27 – 33; i.e., the plurality of operational instructions corresponds to control input for controlling the base station 11, and sending instructional material to student input devices); a plurality of operational devices (student stations 12(1) through 12(S) – see e.g., col. 2, line 53) utilizable by a plurality of users (see e.g., col. 2, lines 23 – 30), wherein each operational device has a plurality of buttons (keypad 23 – see e.g., col. 5, lines 11 – 14; i.e., the student station 12(1) through 12(S) include keypad 23. which includes a plurality of alphanumeric buttons), and the user (student – see e.g., col. 5, line 15; i.e., the user corresponds to a student) can output a plurality of operational instructions (see e.g., col. 5, lines 14 – 15; i.e., outputting a plurality of operational instructions corresponds to the student depressing successive keys of the alphanumeric keypad 24) to the host computer (see e.g., col. 5, lines 29 – 30; i.e., the host computer corresponds to the instructor's base station 11, in which base station 11 can receive transmitted data through communication link 17) by pressing a corresponding button to use the interactive program (see e.g., col. 5, lines 14 – 15; i.e., outputting a plurality of operational instructions to the instructor's base station 11 corresponds to the student

Page 4

Art Unit: 2179

depressing successive keys of the alphanumeric keypad 24), wherein each operational device (student input device 13(S) – see e.g., col. 5, line 49; i.e., student input device 13(S)) has a unique ID code (see e.g., col. 5, line 64; i.e., student input device 13(S) stores an identifier code within memory 32), and the operational instruction (see e.g., col. 5, lines 66 – 67; i.e., the operational corresponds to the students response) is output with one ID code (see e.g., col. 6, lines 4 – 9; i.e., as the student sends a response to base station 11, the identifier code is also transmitted) so that the host computer (see e.g., col. 6, lines 6; i.e., the host computer corresponds to base station 11) is capable of identifying each operational device (see e.g., col. 6, lines 8 – 9; i.e., disambiguating responses corresponds to identifying individual student devices); the memory of the host computer (see e.g., col. 6, lines 23 – 24; i.e., the memory of instructor base station 11 includes RAM 41 and ROM 42) further comprising a control manner specifying program (see e.g., col. 6, line 22; the control manner specifying program corresponds to program instructions) executable by the processor (see e.g., col. 6, line 21) to perform the following means: a first means for distributing (see e.g., col. 6, lines 27 – 33; i.e., distributing corresponds to the base station 11 transmitting instructional material to individual student input devices) the plurality of operational instructions (see e.g., col. 6, lines 27 – 33; i.e., the plurality of operational instructions corresponds to the instructional material provided by base station 11) of the interactive program to at least two users (students – see e.g., col. 6, line 30) so that the interactive program is used by at least two users (students - see e.g., col. 6, line 30); and a second means for changing the distribution method (see e.g., col. 4, lines 2 – 3; i.e.,

Art Unit: 2179

the changing of distribution method corresponds to the base station 11 selectively transmitting information to student stations 12(S)) of the plurality of operational instructions of the interactive program to the user (see e.g., col. 4, lines 1-7).

As to dependent claim 3, Lemelson et al. teaches:

The system of claim 1 further comprising a portable computer (see e.g., col. 17, lines 1 -5; i.e., the portable computer corresponds to the student stations 12(S) and base station 11, wherein the devices are able to use radio and infrared non-hard-wired communication channels), the portable computer wirelessly controlling the control manner specifying program (see e.g., col. 1, lines 53 - 56; i.e., base station 11 controls the distribution of essay questions, operational information or multiple choice questions through radio links or infrared links) of the host computer to execute the first means and the second means (see e.g., col. 1, lines 45 - 56; i.e., base station 11 controls the distribution of essay questions, instructional material or multiple choice questions, which are distributed to student device 13(S)).

As to independent claim 7, Lemelson et al. teaches:

A computer readable media (see e.g., col. 6, lines 23 – 24; the computer readable media corresponds to Random Access Memory (RAM) 41 and Read Only Memory (ROM) 42) storing a specified control manner program (see e.g., col. 6, lines 22 – 24; i.e., RAM 41 and ROM 42 store program instructions and data, which correspond to the specified control manner program), the specified control manner program executable with an interactive program in a computer (see e.g., col. 6, lines 21 – 24; i.e., base station 11 includes a microprocessor 40 which performs processing operation

in accordance with the program instructions stored on RAM 41 and ROM 42) so that the interactive program can be utilized by a plurality of users (see e.g., col. 6, lines 26 -33; i.e., the base station 11 receives input from keypad 43, which transmits instructional material to a plurality of students), wherein the interactive program accepts a plurality of different operational instructions (see e.g., col. 6, lines 25 – 36; a plurality of operational instructions accepted by base station 11 includes transmitting instructional material, queries, visual output, true/false answers, response display, and hard copy outputs by using external keypad 43), and the plurality of users (see e.g., col. 3, lines 47 – 55; the plurality of users corresponds to students and instructor) can operate the interactive program (see e.g., col. 6, lines 24 – 33; i.e., the educational system is operated by base station 11 or student devices 12(S) through the use of external keypad 43) via different operational devices (see e.g., col.2, lines 47 – 57; i.e., the different operational devices corresponds to the plurality of student input devices 12(S) and instructor base station 11), the specified control manner program (see e.g., col. 6, lines 22 – 24; i.e., RAM 41 and ROM 42 store program instructions and data, which correspond to the control manner program) comprising: a first program code (program instructions – see e.g., col. 6, lines 22) for distributing the plurality of operational instructions of the interactive program (see e.g., col. 6, lines 27 – 30; i.e., the program instructions are executed by microprocessor 40, which enables instructor base station 11 to transmit instructional materials, providing scoring, and statistical information to student devices) into different groups (see e.g., col. 4, lines 2 - 8; i.e., base station 11 can selectively transmit information to students); and a second

program code (program instructions – see e.g., col. 6, lines 22) for distributing the plurality of operational instructions to the plurality of operational devices (see e.g., col. 6, lines 27 – 30; i.e., the program instructions are executed by microprocessor 40, which enables instructor base station 11 to transmit instructional materials, providing scoring, and statistical information to a plurality of student devices).

As to dependent claim 8, Lemelson et al. teaches:

The computer readable media (see e.g., col. 6, lines 23-24; i.e., the computer readable media corresponds to RAM 41 and ROM 42) as claimed in claim 7 further comprising driver program code (see e.g., col. 6, lines 19-24; i.e., program instructions associated with driver program code is stored in RAM 41 or ROM 42 and is executed by microprocessor 40) for processing the plurality of operational devices (see e.g., col. 7, lines 38-58; i.e., base station 11 receives responses from student input devices 13(S) for processing) and outputting the operational instruction to control the interactive program according to the first program code and the second program code (see e.g., col. 6, lines 24-30; i.e., base station 11 outputs instructional material to a plurality of student devices, in which the instructional material associated with the first and second program code, which is used to assist the students in using the interactive educational system).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

Art Unit: 2179

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 2, 4 – 6, 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lemelson et al. (Patent No. 5,823,788) in view of Bouton et al. (Patent No. 5,551,701).

As to dependent claim 2, Lemelson et al teaches a system, further comprising a connection device (communication links 17(S) – see e.g., col. 3, lines 45 - 47), a plurality of operational devices (see e.g., col. 3, lines 48 – 50; i.e., the operational device corresponds to the student's input devices 13(S)), information being sent to the host computer (see e.g., col. 3, lines 48 – 50; i.e., the student's input device 13(S) transmits responses to base station 11 for processing) via the connection device (see e.g., col. 3, lines 44 - 51), but does not teach operational instructions being sent to the host computer. Bouton et al. teaches operational instructions (see e.g., col. 12, lines 9 – 20; i.e., the operational instructions corresponds to the alphanumeric characters assigned by the user to control the operation of an interactive program) being sent to a host computer (personal computer 12 – see e.g., col. 12, line 31; i.e., the host computer corresponds to personal computer 12, in which the operational instructions are sent). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the system, connection device, plurality of operational devices, and information being sent to the host computer of Lemelson et al. with the transmission of operational instructions to a host computer of Bouton et al. because the host computer has the ability to retain the configuration information of

operational instructions even after the interactive program has been terminated or the host computer has been turned off (see e.g., col. 4, lines 16 – 21).

As to dependent claim 4, Lemelson et al. teaches a system, wherein the connection device (communication links 17(S) – see e.g., col. 3, lines 45 - 47) has wireless communications functionality (see e.g., col. 3, lines 44 - 47; i.e., wireless communication corresponds to radio or infrared links), and the system further comprises a portable computer (see e.g., col. 17, lines 1 - 5; i.e., the portable computer corresponds to base station 11 having wireless capabilities), the portable computer wirelessly controlling the control manner (see e.g., col. 6, lines 27 - 33; i.e., base station 11 controls the distribution of essay questions, instructional material, and multiple choice questions through hard-wired connections, radio links or infrared links) specifying program of the host computer to execute the first means and the second means (see e.g., col. 1, lines 45 - 56; i.e., base station 11 controls the distribution of essay questions, instructional material or multiple choice questions).

As to dependent claim 5, Lemelson et al. teaches a system, and control manner specifying program (see e.g., col. 1, lines 53 – 56; i.e., base station 11 controls the distribution of essay questions, operational information or multiple choice questions through radio links or infrared links), but does not teach an operation instructions group distribution list, wherein the operation instruction group records a plurality of corresponding relations between the operation instructions and the buttons. Lemelson et al. further does not teach an operational device distribution list for recording the operation instructions group distribution list corresponding to each operation, and the

Art Unit: 2179

data within the operation instructions group distribution list and the operational device distribution list is changeable to affect the second means. Bouton et al. teaches an operation instructions group distribution list (fill-in list – see e.g., col. 13, lines 32 – 34; i.e., the operation instructions group distribution list corresponds to the "fill-in list" provided by the interactive program residing on host computer 12) that records a plurality of corresponding relations between operation instructions and buttons (see e.g., Fig. 2 and col. 13, lines 35 – 40; i.e., the interactive program prompts the user to input keycodes related to a plurality of buttons associated with the controller). Bouton et al. further teaches an operational device distribution list for recording the operation instructions group distribution list corresponding to each operation (see e.g., col. 13, lines 31 – 54; i.e., once a particular controller has been reconfigured in terms of operational instructions, the interactive program advances to the next device to be reconfigured within the list of controllers), and the data within the operation instructions group distribution list and the operational device distribution list is changeable to affect the second means (see e.g., col. 11, lines 31 – 51; i.e., the operation instructions group distribution list and the operational device distribution list is interchangeable by the host computer). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the control manner specifying program and system of Lemelson et al. with the operation instructions group distribution list, operational device distribution list, and the ability of both distribution lists to be changeable to affect the second means of Boutron et al. because any other type of

Art Unit: 2179

controllers can be designed to substitute the initial controller while retaining the reconfiguration capability (see e.g., col. 11, lines 49 - 51).

As to dependent claim 6, Lemelson et al. teaches a portable computer (see e.g., col. 17, lines 1 – 5; i.e., the portable computer corresponds to the student stations 12(S) and base station 11, wherein the devices are able to use radio and infrared nonhard-wired communication channels) changing data in a wireless manner (see e.g., col. 3, lines 51 – 64; i.e., the changing of data corresponds to the base station 11 transmitting questions and supplementary instructional material to student stations 12(S) by using communication links 17(S)), but does not teach an operation instructions group distribution list. Bouton et al. teaches an operation instructions distribution list (fill-in list – see e.g., col. 13, lines 32 – 34; i.e., the operation instructions group distribution list corresponds to the "fill-in list" provided by the interactive program residing on host computer 12). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the portable computer and changing data in a wireless manner of Lemelson et al. with the operation instructions distribution list of Bouton et al. because the operation instructions distribution list allows the students/users to reconfigure their interactive program controllers in regards to their desired preferences (see e.g., col. 3, lines 11 – 13).

As to independent claim 9, Lemelson et al teaches a computer readable media (see e.g., col. 6, lines 23 – 24; i.e., the computer readable media corresponds to RAM 41 and ROM 42) storing a specified control manner program (see e.g., col. 6, lines 22 – 24; the control manner specifying program corresponds to program instructions), in

Art Unit: 2179

which the specified control manner program is executable with an interactive program (see e.g., col. 6, lines 21 – 24; i.e., base station 11 includes a microprocessor 40 which performs processing operation in accordance with the program instructions stored on RAM 41 and ROM 42) in a computer (see e.g., col. 6, line 20; i.e., base station 11 comprises a microprocessor 40, in which the interactive educational system is executed) so that the interactive program supports a plurality of users (see e.g., col. 2, lines 23 – 30; i.e., the interactive educational system is programmed to support a plurality of students and instructors by using student station 12(S) and base station 11), wherein the interactive program accepts a plurality of different operational instructions (see e.g., col. 1, lines 47 – 56; i.e., the interactive educational system accepts different operational instructions, which corresponds to the students depressing different buttons on student stations 12(S) to answer questions), and the plurality of users (see e.g., col. 3. lines 47 – 55; the plurality of users corresponds to students and instructor) operate the interactive program via different operational devices program (see e.g., col. 6, lines 24 – 33; i.e., the educational system is operated by base station 11 or student devices 12(S) through the use of external keypad 43) having a plurality of buttons (see e.g., Fig. 2 and col. 5, lines 11 - 15),), but does not teach an operation instructions group distribution list, wherein the operation instruction group records a plurality of corresponding relations between the operation instructions and the buttons. Lemelson et al. further does not teach an operational device distribution list for recording the operation instructions group distribution list corresponding to each operation, and the data within the operation instructions group distribution list and the operational device

distribution list is changeable to affect the second means. Bouton et al. teaches an operation instructions group distribution list (fill-in list – see e.g., col. 13, lines 32 – 34; i.e., the operation instructions group distribution list corresponds to the "fill-in list" provided by the interactive program residing on host computer 12) that records a plurality of corresponding relations between operation instructions and buttons (see e.g., Fig. 2 and col. 13, lines 35 – 40; i.e., the interactive program prompts the user to input keycodes related to a plurality of buttons associated with the controller). Bouton et al. further teaches an operational device distribution list for recording the operation instructions group distribution list corresponding to each operation (see e.g., col. 13, lines 31 – 54; i.e., once a particular controller has been reconfigured in terms of operational instructions, the interactive program advances to the next device to be reconfigured within the list of controllers), and the data within the operation instructions group distribution list and the operational device distribution list is changeable to affect the second means (see e.g., col. 11, lines 31 – 51; i.e., the operation instructions group distribution list and the operational device distribution list is interchangeable by the host computer). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the control manner specifying program and system of Lemelson et al. with the operation instructions group distribution list, operational device distribution list, and the ability of both distribution lists to be changeable to affect the second means of Bouton et al. because any other type of controllers can be designed to substitute the initial controller while retaining the reconfiguration capability (see e.g., col. 11, lines 49 - 51).

As to dependent claim 10, Lemelson et al. teaches the computer readable media (see e.g., col. 6, lines 23 – 24; i.e., the computer readable media corresponds to RAM 41 and ROM 42) further comprising driver program code (see e.g., col. 6, lines 19 – 24; i.e., program instructions associated with driver program code is stored in RAM 41 or ROM 42 and is executed by microprocessor 40) for processing the plurality of operational devices (see e.g., col. 7, lines 38 – 58; i.e., base station 11 receives responses from student input devices 13(S) for processing) and outputting the operational instruction to control the interactive program according to the first program code and the second program code (see e.g., col. 6, lines 24 – 30; i.e., base station 11 outputs instructional material to a plurality of student devices, in which the instructional material associated with the first and second program code, which is used to assist the students in using the interactive educational system), but does not teach outputting the operational instruction to control the interactive program according to the operation instructions group distribution list and the operational device distribution list. Bouton et al. teaches operational instructions (see e.g., col. 12, lines 9 – 20; i.e., the operational instructions corresponds to the alphanumeric characters assigned by the user to control the operation of an interactive program), a operation instructions distributions list (fill-in list – see e.g., col. 13, lines 32 – 34; i.e., the operation instructions group distribution list corresponds to the "fill-in list" provided by the interactive program residing on host computer 12), a operational device distributions list (see e.g., col. 13, lines 31 – 54; i.e., once a particular controller has been reconfigured in terms of operational instructions, the interactive program advances to the next device to be

39).

reconfigured within the list of controllers), and outputting operational instruction to control the interactive program (see e.g., col. 12, lines 13 – 17; i.e., each button is associated with a particular function used to control the interactive program. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the computer readable media, first program code, second program code, driver program code, and the processing capabilities of Lemelson et al. with the operational instructions associated with the operation instructions distributions list and operational device distribution list of Bouton et al. because the reconfiguration program is capable of determining the number of controllers present, in which the student/user is able to reconfigure a plurality of controllers (see e.g., col. 13, lines 23 -

Page 15

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Prior art Patent No. 6,071,194 can be applicable and pertinent to applicant's disclosure. Prior art disclosed by Sandersonet al. discloses a method to reconfigure video game controllers, wherein the system comprises a functional and reconfiguration mode.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Prior art Patent No. 6,719,633 can be applicable and pertinent to applicant's disclosure. Prior art disclosed by Leifer et al. discloses a wireless game controller and a host console that interacts through infrared transmission.

Art Unit: 2179

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Prior art Patent No. 6,342,010 can be applicable and pertinent to applicant's disclosure. Prior art disclosed by Slifer et al. discloses a wireless controller

Inquiries

that transmits a controller ID code to identify which controller is transmitting information.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Henry Vuu whose telephone number is (571) 270-1048. The examiner can normally be reached on 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Weilun Lo can be reached on (571) 272-4847. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Examiner's Name:

HENRY VULL

Page 17

Examiner's Signature: Hum

Date: **/**/)////2

BAHUYNH A